

**REMARKS**

Upon entry of the instant amendment, claims 1-7 and 19-21 will remain pending in the present application.

In the instant amendment, claims 1 and 19 have been amended. Claims 12-17 and 22-24 have been cancelled without prejudice or disclaimer of the subject matter contained therein.

The instant amendment made herein to the claims does not incorporate new matter into the application as originally filed. For example, support for amended claims 1 and 19 can be found in Examples 1-5 in Table 1 of the present specification (see page 15). More specifically, the amount of aluminum hydroxide (Component A in Table 1) is based on the following calculation:

$(20/94) \times 100$  to  $(35/94) \times 100$  parts by weight = 21.3 to 37.2 parts by weight per 100 parts by weight of the claimed component (i) (i.e., the organopolysiloxane containing at least two alkenyl radicals in a molecule) (corresponding to Component B in Table 1).

Regarding the amount of silica (Components G in Table 1), the total amount of all the components excluding component (G) (i.e., silica) in Example 1 is 149.25 parts and the total amount of all the components excluding component (G) in Example 3 is 134.25 parts. Thus, the amount of silica (Component G in Table 1) is calculated, as follows:

$(21/149.25) \times 100$  to  $(21/134.25) \times 100$  parts by weight = 14.1 to 15.6 parts by weight per 100 parts by weight of all the components excluding silica.

Therefore, the specific amount of aluminum hydroxide (i.e., 21.3 to 37.2 parts by weight per 100 parts by weight of component (i)) and the specific amount of silica (i.e., 14.1 to 15.6

parts by weight per 100 parts by weight of all the components excluding silica) are fully supported by the specification. Incidentally, since claims 1 and 19 have been amended to recite the specific contents of aluminum hydroxide and silica in accordance with the data in working Examples as disclosed in the specification, it is further evident that the present invention exhibits advantageous properties, as discussed below.

Accordingly, proper consideration of each of the pending claims is respectfully requested at present, as is entry of the present amendment.

***Claim Rejections under 35 U.S.C. § 103***

At pages 2-8 of the Office Action, claims 1-3, 12-17, 19 and 21-24 have been rejected under 35 U.S.C. § 103(a) as being obvious over “the admitted prior art” (APA) in view of Fujiki U.S. '094 (U.S. Patent No. 5,438,094), Ichikawa U.S. '495 (U.S. Patent No. 6,501,495) and Takuman EP '211 (European Published Application No. 1 225 211) (see paragraph “2.” on pages 2-4 of the Office Action). Further, claims 1-7, 12-17 and 19-24 have been rejected under 35 U.S.C. § 103(a) as being obvious over APA in view of Tsuji EP '702, Ichikawa U.S. '495 and Takuman EP '211 (see paragraph “3.” on pages 4-8 of the Office Action).

Applicants respectfully traverse. Reconsideration and withdraw of the rejections is respectfully requested based upon the following explanation.

**Non-Obviousness over the Cited References**

As recited in currently amended claim 1, the present invention employs an inorganic filler (iv) which comprises an aluminum hydroxide and silica in a specific amount (*i.e.*, an inorganic

filler comprising an aluminum hydroxide in an amount of 21.3 to 37.2 parts by weight per 100 parts by weight of component (i), and silica in an amount of 14.1 to 15.6 parts by weight per 100 parts by weight of all the components excluding silica).

First, Takuman EP '211 discloses aluminum hydroxide. On the other hand, Fujiki US '094 and Tsuji EP '702 disclose alumina. It is noted that aluminum hydroxide is represented by the chemical formula Al(OH)<sub>3</sub> and alumina is represented by the chemical formula Al<sub>2</sub>O<sub>3</sub>. Thus, aluminum hydroxide is clearly distinguished from alumina since their molecular structures and crystalline structures are different from each other.

Therefore, there is no rationale for one skilled in the art to combine Fujiki US '094 or Tsuji EP '702 disclosing alumina together with either Takuman EP '211 disclosing aluminum hydroxide in an attempt to obtain the present invention.

Further, in the Ichikawa U.S. '495 reference, an aluminum hydroxide and silica are merely listed among many kinds of inorganic and organic filler (see column 10, lines 23-33 of Ichikawa U.S. '495.) Thus, the Ichikawa U.S. '495 reference fails to specifically disclose or suggest the claimed combination of aluminum hydroxide and silica.

Furthermore, none of the cited references discloses or suggests the claimed amounts of aluminum hydroxide and silica.

Therefore, there is no reasonable expectation of success and/or rationale based on the cited references and AAPA for one skilled in the art to arrive at the present invention.

Unexpected Results

In the previous response to the Office Action filed on January 2, 2009, it was explained that the use of aluminum hydroxide ( $\text{Al(OH)}_3$ ) and silica as (iv) an inorganic filler, as recited in claim 1, can attain excellent properties in adhesion (*e.g.*, peel strength, cohesive failure and inflation test adhesion).

Regarding the unexpected, advantageous properties of the present invention, the Examiner states in the outstanding Office Action that there is no conclusive showing of unexpected results because i) the claims simply require the general inclusion of aluminum hydroxide and silica and 2) the experimental data is not commensurate in scope with the claims. (See page 9, lines 9-12 of the Office Action).

As currently amended, claim 1 has been amended to recite the specific amount of the aluminum hydroxide and silica (*i.e.*, an inorganic filler comprising an aluminum hydroxide in an amount of 21.3 to 37.2 parts by weight per 100 parts by weight of component (i), and silica in an amount of 14.1 to 15.6 parts by weight per 100 parts by weight of all the components excluding silica). Therefore, upon entry of the present amendment, the unexpected, advantageous properties of the present invention are further clarified and the data of the 37 CFR § 1.132 Declaration of a co-inventor (the 132 declaration), which was enclosed with the last submission of May 5 2008, and the working Examples of the specification are commensurate in scope with the amended claims.

First, the Examples (in the present invention) and Comparative Examples as described in the instant specification evidence the advantageous properties exhibited by the present invention.

For example, the composition of Comparative Example 2 contains an increased amount of fumed silica (Component G) as compared with compositions of Examples 1-5 (present invention) and Comparative Example 1, but does not contain aluminum hydroxide. In Comparative Example 2, even though an increased amount of fumed silica is employed, peel strength and cohesive failure properties are poor, compared to Examples 1-5. (See Table 1 at page 15 of the instant specification). Moreover, the inflation test adhesion property is poor even if more fumed silica is employed as in Comparative Example 2. On the other hand, the present invention, which employs aluminum hydroxide and silica in the specific amounts, exhibits excellent properties with respect to peel strength, cohesive failure and inflation test adhesion.

Please note that 21.3 to 37.2 parts of aluminum hydroxide (Component A in Table 1) is based on working Examples 1-5. More specifically,  $(20/94) \times 100$  to  $(35/94) \times 100$  parts by weight = 21.3 to 37.2 parts by weight per 100 parts by weight of component (i) (*i.e.*, the organopolysiloxane containing at least two alkenyl radicals in a molecule) (Component B in Table 1)

Further, 14.1 to 15.6 parts of silica is based on working Examples 1-5 as shown in Table 1. (see Component G in Table 1). More specifically, the total amount of all the components excluding Component G (*i.e.*, silica) in Example 1 is 149.25 parts. The total amount of all the components excluding Component G in Example 3 is 134.25 parts. Thus, the silica content is calculated as follows:

$(21/149.25) \times 100$  to  $(21/134.25) \times 100$  parts by weight = 14.1 to 15.6 parts by weight per 100 parts by weight of all the components excluding silica.

Therefore, the data in working Examples of the specification is fully commensurate in scope with the currently amended claims. It is evident that the present invention exhibits advantageous and unexpected results.

Furthermore, from the data in the 132 declaration, it is evidenced that the claimed invention (*i.e.*, with aluminum hydroxide and silica) exhibits unexpected, advantageous properties even compared to experimental data in which the same amount of the total inorganic filler (*e.g.*, aluminum oxide, aluminum hydroxide and silica, but not combination of aluminum hydroxide and silica) is employed. For the Examiner's convenience, relevant data in Table I of the 132 Declaration is summarized in Table II below.

Table II

| Components<br>(pbw)            | Comparative Example |           | Example     |
|--------------------------------|---------------------|-----------|-------------|
|                                | 3                   | 4         | 1           |
| A-1                            | 0                   | 0         | <u>35</u>   |
| A'-1                           | 0                   | <u>35</u> | 0           |
| G                              | <u>56</u>           | <u>21</u> | <u>21</u>   |
| Total Amount (A-1, A'-1 and G) | <u>56</u>           | <u>56</u> | <u>56</u>   |
| Peel strength (N/cm)           | 2.9                 | 3.0       | <b>6.0</b>  |
| Cohesive failure (%)           | 85                  | 85        | <b>100</b>  |
| Elongation at break (%)        | 900                 | 950       | <b>1100</b> |
| Inflation test adhesion        | NG                  | NG        | <b>OK</b>   |

A-1 : Aluminum Hydroxide

A'-1 : Aluminum Oxide

G : Fumed Silica

As explained above, it is evident, from the data of the 132 Declaration and the Examples and Comparative Examples in the specification, that the use of aluminum hydroxide and silica in

the specific amount as (iv) an inorganic filler, as recited in the presently amended claims, can attain excellent properties in adhesion (*e.g.*, peel strength, cohesive failure and inflation test adhesion), as compared with the use of (fumed) silica alone or in combination with aluminum oxide (alumina).

Accordingly, even if a *prima facie* case of obviousness has been properly alleged, such obviousness has been rebutted by the evidence of unexpected, advantageous properties discussed above.

In view of the above, the present invention patentably defines over the cited references. Applicants respectfully request that the Examiner withdraw the above rejections.

**CONCLUSION**

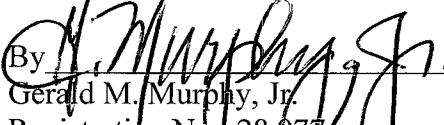
In view of the above amendment and comments, Applicants respectfully submit that the claims are in condition for allowance. A notice to such effect is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Toyohiko Konno (Reg. No. L0053) at the telephone number below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

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